MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2015/2016

BCE2034 – PROJECT CYCLE AND EVALUATION

(All sections / Groups)

11 MARCH 2016
9.00 a.m. - 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of **TWO (2)** sections in **SEVEN (7)** printed pages:
   Section A: Twenty (20) Multiple Choice Questions
   Section B: Three (3) Structured Questions

2. Answer **ALL** questions in the answer booklet provided.

3. Marks are shown at the end of each question.

SECTION A: TWENTY (20) MULTIPLE CHOICE QUESTIONS (40 marks)

1. The following is the attribute for a project EXCEPT:
   a. Clear objective.
   b. Has a customer.
   c. Specific time frame.
   d. Involve huge cost.

2. Which of the following is NOT an example of mega project?
   a. Marina Bay Sands, Singapore
   b. Beijing Water Cube, China
   c. IOI City Mall, Putrajaya
   d. Kuala Lumpur International Airport (KLIA)

3. The following is part of a project charter EXCEPT:
   a. Rationale for the project.
   b. Technical description of the project.
   c. Expected benefits of the project.
   d. Completion date of the project.

4. The initiating phase of the project life cycle starts with:
   a. forming a committee.
   b. recognizing a need, problem or opportunity.
   c. discussing how project is identified.
   d. preparing a project charter.

5. The reason behind an organization prepares a request for proposal is:
   a. the organization does not have the expertise or staff capacity to plan and perform the project.
   b. to respond to a project charter.
   c. to prepare a proposal.
   d. to inform the customer about project cost.

6. The decision to develop a proposal depends on:
   a. schedule.
   b. budget.
   c. competition.
   d. customer satisfaction.

7. Which contract is appropriate for projects that are well-defined and with little risks?
   a. Cost-reimbursement contract.
   b. Fixed-price contract.
   c. Cost plus fixed fee contract.
   d. Fixed fee contract.

8. Which of the following is a qualitative method in demand forecasting?
   a. Delphi method.
   b. Consumption level method.
   c. Chain ratio method.
   d. End use method.

9. The following influences the choice of technology EXCEPT:
   a. Plant capacity.
   b. Ease of absorption.
   c. Principal inputs.
   d. Product quality.

10. If Jojo plans to move her frozen food factory, the following factors influence her choice of location EXCEPT:
   a. Proximity to raw materials and markets.
   b. Governmental policies.
   c. Availability of infrastructure.
   d. Pollution index.

11. The following is the long-term objective of environmental impact analysis EXCEPT:
   a. To provide information for decision-making on the environmental consequences of proposed actions.
   b. To protect human health and safety.
   c. To avoid irreversible changes and serious damage to the environment.
   d. To safeguard valued resources, natural areas and ecosystem components.

12. Which of the following mean of finance is provided by financial institutions?
   a. Share capital.
   b. Term loans.
   c. Debenture capital.
   d. Public deposits.

13. Which of the following is a non-discounting investment criteria?
   a. Accounting rate of return.
   b. Net present value.
   c. Profitability index.
   d. Internal rate of return.

14. The unexpected increase in material costs is considered as:
   a. schedule risk.
   b. cost risk.
   c. technical risk.
   d. external risk.

15. Failure to meet customer performance requirements is considered as a(n):
    a. schedule risk.
    b. cost risk.
    c. technical risk.
    d. external risk.

16. To assess risks of a project, one should do the following EXCEPT:
    a. Determine the likelihood the risk event will occur.
    b. Evaluate the degree of impact on the project objective.
    c. Prioritize the risks of the project.
    d. Assign responsibility for implementation.

17. The following may happen when monitoring risk EXCEPT:
    a. Review and evaluate all risks if there is any change to the likelihood of occurrence.
    b. Review and evaluate all risks if there is any change to the potential impact of the risks.
    c. New risks may be identified.
    d. Establish a trigger point for implementing an action.

18. One of the demerits of sensitivity analysis is:
    a. show how robust or vulnerable a project is.
    b. interpretation of result is subjective.
    c. articulate the concerns that project evaluator has.
    d. explore how the variability of critical factor be contained .

19. Decision tree analysis is:
    a. a tool for analyzing situations where sequential decision making in face of risk is involved.
    b. a tool for analyzing situations where one-time decision making in face of risk is involved.
    c. a tool for analyzing situations where repeated decision making in face of risk is involved.
    d. a tool for analyzing situations where decision making in face of risk is involved.

20. The following are the key steps in decision tree analysis EXCEPT:
    a. Identifying the risks.
    b. Delineating the decision tree.
    c. Specifying probabilities and monetary outcomes.
    d. Evaluating various decision alternatives.

Continued...

SECTION B: THREE (3) STRUCTURED QUESTIONS (60 marks)

Question 1 (20 marks)

Read the following passage and answer the following questions:

Mega Projects Galore in KL's 2016 Budget

KUALA LUMPUR There were plenty of big projects listed by Prime Minister Najib Razak when he unveiled the 2016 Budget on Friday, including billions of dollars for MRT lines, rural roads and upgrading of airports, as the government moves to keep the economy humming next year amid worries of a global slowdown.

These projects included a RM1 billion (S$328.7 million) outlay for a bus network system in Sabah, RM900 million to ease traffic snarls at the major Kuala Lumpur road of Jalan Tun Razak, and RM200 million to improve pot-holed roads in rural Felda land settlements where a big chunk of government support is located.

And then there were the multi-year mega projects, such as the RM11 billion plan to build the town centre for wired-up Cyberjaya city south of Kuala Lumpur, and a RM7 billion airport township, dubbed Aeropolis, around Kuala Lumpur International Airport.

Parts of the MRT train network - Malaysia's biggest-ever single project being built at a cost of RM42 billion - will be ready by March next year, PM Najib said on Friday, giving updates on the much-anticipated network.

Kuala Lumpur and its suburbs are currently served by the Light Rail Transit, monorail and KTM's fast-train Komuter networks, while the MRT will cover a much larger area within the heavily populated Klang Valley.

A new line, called MRT II, will be built next year from Sungai Buloh in the north-west of KL, to Putrajaya in the south, spanning 52km and costing another RM28 billion, the Premier said.

The Straits Times on 25 October 2015

(i) Briefly discuss **TWO (2)** relevant key environmental concerns within the context of these mega projects. (8 marks)

(ii) Briefly discuss **FOUR (4)** relevant key social concerns within the context of these mega projects. (12 marks)

Continued...

Question 2 (20 marks)

(a) List **FIVE (5)** means of finance for a project. (5 marks)

(b) The following is the expected cash flow for Project B and Project J:

Year	Project B (RM)	Project J (RM)
0	(6000)	(6000)
1	3500	1000
2	2500	3000
3	1500	4000

Assuming the cost of capital is 8%.

Jimmy would like to know which project is worth pursuing. As an investment analyst, help Jimmy to make the right decision by calculating:

(i) The value of NPV for each project. (6 marks)

(ii) The profitability index for each project. (6 marks)

(iii) Based on part (i) and part (ii), are the results consistent? (3 marks)

Question 3 (20 marks)

(a) Discuss the importance of risk analysis. (5 marks)

(b) Suppose you are a wedding planner. Your client requested you to hold a wedding dinner in a ballroom of a hotel. Prepare a risk assessment matrix with **THREE (3)** risks. (15 marks)

End of Questions

Formula sheet

Exponential Smoothing Method

$$F_{t+1} = F_t + \alpha e_t$$

$$MSE = \frac{\Sigma(S_i - F_i)^2}{n}$$

Moving Average Method

$$F_{t+1} = \frac{S_t + S_{t-1} + \cdots + S_{t-n+1}}{n}$$

Linear approximation model

$$n_t = pN + (q-p)N_{t-1} + (q/N) \times (N_{t-1})^2$$

Present Value

$$PV = FV_n\left[\frac{1}{(1+r)^n}\right]$$

$$PV = FV_n\left[\frac{1}{1+r/m}\right]^{mn}$$

Future value of an annuity

$$FVA_n = A[(1+r)^n - 1]/r$$

Present value of an annuity

$$PVA = A\left[\left\{1-(1+r)^{-n}\right\} \div r\right]$$

PV of a Growing Annuity

$$A(1+g)\left[\frac{1-\frac{(1+g)^n}{(1+r)^n}}{r-g}\right]$$

Benefit Cost Ratio

$$Benefit - Cost\ ratio: BCR = \frac{PVB}{I}$$

$$Net\ benefit - cost\ ratio: NBCR = \frac{PVB - I}{I}$$

Internal Rate of Return

$$Investment = \sum_{t=1}^{n} \frac{C_t}{(1+r)^t}$$

Present value of the costs (PVC)

$$PVC = \sum_{t=0}^{n} \frac{Cash\ outflow}{(1+r)^t}$$

Accounting Rate of Return

$$\frac{Profit\ after\ tax}{Book\ value\ of\ the\ investment}$$

End of Paper